

**PATENT****ABSTRACT**

This invention provides a method for providing network security services, such as those provided by the IPSEC protocol, through network address translation (NAT). The method is based on determining the transformations that occur on a packet and compensating for the transformations. Because only TCP and UDP protocols work through NATs, the IPSEC AH/ESP packets are encapsulated into UDP packets for transport. Special operations are performed to allow reliable communications in such environments.